Amendments to the Claims:

This listing of claims will replace the listing of the claims in the application.

Listing of Claims:

1. (Currently amended) A process for alkylating an aromatic hydrocarbon reactant with an alkylating agent to produce an alkylated aromatic product, said process comprising the steps of:

(a) introducing said aromatic hydrocarbon reactant and said alkylating agent into a reactor unit ~~containing a plurality of sequentially arranged beds~~ comprised of a first bed ~~containing a first catalyst effective for alkylating said aromatic hydrocarbon reactant~~ and a second bed downstream from said first bed, said first bed contains a first catalyst which comprises 65 wt.% ZSM-5 and 35 wt.% silica, and said second bed contains ~~containing~~ a second catalyst which comprises 65 wt.% ZSM-5 and 35 wt.% alumina ~~effective for alkylating said aromatic hydrocarbon reactant and having less catalytic activity than said first catalyst~~;

(b) alkylating in said first bed under alkylation conditions said aromatic hydrocarbon reactant with said alkylating agent to form a first effluent which comprises ~~comprising~~ a mono-alkylaromatic compound, an unreacted portion of the aromatic hydrocarbon reactant, and polyalkylated aromatic compounds, and

(c) alkylating in said second bed under alkylation conditions at least a portion of said unreacted aromatic hydrocarbon reactant present in said first effluent with said alkylating agent to form a product effluent which comprises~~, and~~

~~d) removing said product effluent from said reactor unit, said product effluent comprising~~ a mono-alkylaromatic compound, an unreacted portion of the aromatic hydrocarbon reactant, and polyalkylated aromatic compounds.

2. (Currently amended) The process of claim 1, wherein said alkylation conditions within the reactor unit ~~reaction zone~~ comprise temperature and pressure conditions at which the aromatic hydrocarbon reactant is in a vapor phase.

3. (Original) The process of claim 1, wherein the molar ratio of the aromatic hydrocarbon reactant to the alkylating agent is from about 5 to about 25.

4. (Cancelled)

5. (Original) The process of claim 1, wherein the first catalyst has an alpha value greater than the alpha value of the second catalyst.

6. (Original) The process of claim 1, wherein the first catalyst has an alpha value from about 60 to about 200 and the second catalyst has an alpha value from about 20 to about 100.

7. (Original) The process of claim 1, wherein the reactor unit comprises from 4 to 8 catalyst beds.

8. (Original) The process of claim 1, wherein the first and second catalysts each comprise the same molecular sieve.

9. (Original) The process of claim 1, wherein the first and second catalysts each has a crystal size of less than one micron.

10. (Cancelled)

11. (Original) The process of claim 1, wherein the aromatic hydrocarbon reactant comprises benzene and the alkylating agent comprises ethylene.

12. (Original) The process of claim 11, wherein at least 65% of the total benzene introduced to the reactor unit is introduced in the first bed of the reactor.

13. (Cancelled)

14. (Cancelled)

15. (Cancelled)

16. (Cancelled)

17. (Currently amended) A process for the vapor-phase ethylation of benzene to produce ethylbenzene, said process comprising the steps of:

a) providing a multi-stage alkylation reaction zone having a plurality of series-connected catalyst beds, at least one of the series-connected catalyst beds contains ~~containing~~ a first ~~alkylation~~ catalyst which comprises ~~comprising~~ 65 wt.% ZSM-5 and 35 wt.% silica, ~~a first zeolite~~ and at least one downstream ~~subsequent~~ catalyst bed contains ~~containing~~ a second ~~alkylation~~ catalyst which comprises ~~comprising~~ 65 wt.% ZSM-5 and 35 wt.% alumina ~~a second zeolite, the first alkylation catalyst being more active for the ethylation of benzene than the second alkylation catalyst~~,

b) introducing benzene and ethylene into the multistage alkylation reaction zone; and

c) operating the multistage alkylation reaction zone at temperature and pressure conditions in which the benzene is in a vapor phase to cause vapor-phase ethylation of the benzene in the presence of the first and second ~~alkylation~~ catalysts to produce an alkylation product comprising a mixture of ethylbenzene and polyalkylated aromatic components~~; and~~

~~d) withdrawing the alkylation product from the multistage alkylation reaction zone~~.

18. (Original) The process of claim 17, wherein the feedstock has a benzene/ethylene molar ratio from about 5 to about 25.

19. (Currently amended) The process of claim 17, wherein the ZSM-5 ~~zeolite~~ in the first ~~alkylation~~ catalyst has a silica/alumina ratio from about 5 to about 200.

20. (Currently amended) The process of claim 17, wherein the ZSM-5 ~~zeolite~~ in the second ~~alkylation~~ catalyst has a silica/alumina ratio from about 5 to about 200.

21. (Original) The process of claim 17, wherein the multistage alkylation reaction zone comprises 4 to 8 catalyst beds.

22. (Currently amended) The process of claim 17, wherein the ZSM-5 ~~zeolite~~ of the first and second ~~alkylation~~ catalysts each has a crystal size of less than one micron.

23. (Cancelled)

24. (Cancelled)

25. (Cancelled).

26. (Cancelled).

27. (Cancelled).

28. (Cancelled).

29. (Currently amended) The process of claim 18, wherein the first ~~alkylation~~ catalyst ~~comprises a molecular sieve bound with silica binder and having~~ has an alpha value from about 60 to about 200 and the second ~~alkylation~~ catalyst has an alpha value from about 10 to about 60.

30. (Previously presented) The process of claim 29, further comprising the step of:

e) supplying at least a portion of the polyalkylated aromatic component from the alkylation product along with benzene to a transalkylation reaction zone operated in the vapor or liquid phase under temperature and pressure conditions sufficient to cause transalkylation of the polyalkylated aromatic fraction to produce a transalkylation product having an enhanced ethylbenzene content and a reduced polyalkylated aromatic components content.

31. (Previously presented) The process of claim 30, wherein the reaction zone comprises from 4 to 8 catalyst beds.

32. (Cancelled)

33. (Cancelled)

34. (Cancelled)

35. (New) The process of claim 17, wherein the decline in ethylene conversion per month of the combination of the first and second catalysts is less than the decline in ethylene conversion per month of either catalyst individually.